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 TI Silane aqueous emulsions for waterproofing of building materials
 IN Feder, Michel; Franzoni, Christine
 PA Rhodia Chimie, Fr.
 SO PCT Int. Appl., 27 pp.
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 DT Patent
 LA French
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 ICS C09D183-04
 CC 58-6 (Cement, Concrete, and Related Building Materials)
 FAN.CNT 1

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PI	WO 9965844	A1	19991223	WO 1999-FR1429	19990615 <--
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	FR 2780058	A1	19991224	FR 1998-7638	19980617
	FR 2780058	B1	20010309		
	AU 9941499	A1	20000105	AU 1999-41499	19990615
PRAI	FR 1998-7638	A	19980617		
	WO 1999-FR1429	W	19990615		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 9965844	ICM	C04B041-49
	ICS	C09D183-04
WO 9965844	ECLA	C04B041/49B4; C09D004/00+C08G77/04; C09D183/04+B4 <--
FR 2780058	ECLA	C04B041/49B4; C09D004/00+C08G77/04; C09D183/04+B4

OS MARPAT 132:53734

AB Aqueous emulsions comprise (1) ≥ 1 hydrolyzable silane or silane containing oligomer with mol. weight of silane ≤ 700 g, (2) reaction products of (a) ammonia and/or an aromatic amine and/or a water soluble polyfunctional aliphatic compds containing 2-25 carbon atoms and (b) ≥ 1 carboxylic acids or anhydrides containing 3-22 carbon atoms, and optionally, (c) ≥ 1 a metal salt as the reticulation agent. In one embodiment compns. containing 2-Amino-2-ethylpropane-1,3-diol 3.8, stearic acid 7.2, Rhodasurf R.O.X. (isotridecyclic ethoxyl alc.) 11.8, octyltriethoxysilane 311.6, ammonium zirconium carbonate 3.2, and distilled water 666.4 g. were used. Optionally, the emulsions comprise ≥ 1 nonionic, anionic, or amphoteric surfactants, and ≥ 1 resin. The emulsion can be used for waterproofing of concrete, mortar, stones, bricks, tiles, terra cotta, and even wood.

ST silane aq emulsion waterproofing building material; concrete waterproofing aq silane emulsion

IT Anhydrides

Carboxylic acids, processes

RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)

(C3-C22; silane aqueous emulsions for waterproofing of building materials)

IT Sulfonates

RL: MOA (Modifier or additive use); USES (Uses)

(alkanesulfonates, anionic surfactant; silane aqueous emulsions for waterproofing of building materials)

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IT Silanes
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)
 (alkenyl, waterproofing emulsion; silane aqueous emulsions for waterproofing of building materials)

IT Sulfonic acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkyl esters, anionic surfactant; silane aqueous emulsions for waterproofing of building materials)

IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkyl group-terminated, nonionic surfactant; silane aqueous emulsions for waterproofing of building materials)

IT Betaines
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkyl, amphoteric surfactant; silane aqueous emulsions for waterproofing of building materials)

IT Sulfonates
 RL: MOA (Modifier or additive use); USES (Uses)
 (alkylarene, anionic surfactant; silane aqueous emulsions for waterproofing of building materials)

IT Betaines
 RL: MOA (Modifier or additive use); USES (Uses)
 (amidoalkyl, amphoteric surfactant; silane aqueous emulsions for waterproofing of building materials)

IT Silanes
 Silanes
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (amino, waterproofing emulsion; silane aqueous emulsions for waterproofing of building materials)

IT Protein hydrolyzates
 RL: MOA (Modifier or additive use); USES (Uses)
 (amphoteric surfactant; silane aqueous emulsions for waterproofing of building materials)

IT Surfactants
 (amphoteric; silane aqueous emulsions for waterproofing of building materials)

IT Surfactants
 (anionic; silane aqueous emulsions for waterproofing of building materials)

IT Amines, processes
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
 (aromatic; silane aqueous emulsions for waterproofing of building materials)

IT Salts, processes
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
 (as reticulation agent; silane aqueous emulsions for waterproofing of building materials)

IT Polyoxyalkylenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (diol, ester, amide, or amine derivs.; silane aqueous emulsions for waterproofing of building materials)

IT Coating materials
 (emulsion, water-resistant; silane aqueous emulsions for waterproofing of building materials)

IT Amides, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (fatty, nonionic surfactant; silane aqueous emulsions for waterproofing of building materials)

IT Silanes
 RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

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(haloalkyl, waterproofing emulsion; silane aqueous emulsions for waterproofing of building materials)

IT Silanes
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (mol. weight ≤ 700 g; silane aqueous emulsions for waterproofing of building materials)

IT Fatty acids, uses
 Polyoxyalkylenes, uses
 Terpenes, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (nonionic surfactant; silane aqueous emulsions for waterproofing of building materials)

IT Surfactants
 (nonionic; silane aqueous emulsions for waterproofing of building materials)

IT Carboxylic acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (polycarboxylic, sulfonated; silane aqueous emulsions for waterproofing of building materials)

IT Fatty acids, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (salts, surfactants; silane aqueous emulsions for waterproofing of building materials)

IT Waterproofing
 (silane aqueous emulsions for waterproofing of building materials)

IT Waterproofing agents
 (silane based; silane aqueous emulsions for waterproofing of building materials)

IT Amines, processes
 Amines, processes
 Epoxides
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)
 (silyl, waterproofing emulsion; silane aqueous emulsions for waterproofing of building materials)

IT Amides, uses
 Amides, uses
 Sulfates, uses
 Sulfates, uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (sulfamates, anionic surfactant; silane aqueous emulsions for waterproofing of building materials)

IT Bricks
 Concrete
 Terra cotta
 Tiles
 Wood
 (waterproofing; silane aqueous emulsions for waterproofing of building materials)

IT Stone (construction material)
 RL: TEM (Technical or engineered material use); USES (Uses)
 (waterproofing; silane aqueous emulsions for waterproofing of building materials)

IT 64-19-7D, Acetic acid, alkyl derivs., uses
 RL: MOA (Modifier or additive use); USES (Uses)
 (amphoteric surfactant; silane aqueous emulsions for waterproofing of building materials)

IT 107-35-7D, Taurine, acylalkyl derivs. 107-36-8 110-15-6D, Succinic acid, alkyl esters 7664-38-2D, Phosphoric acid, alkyl esters, uses 7664-93-9D, Sulfuric acid, alkyl esters, uses
 RL: MOA (Modifier or additive use); USES (Uses)

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(anionic surfactant; silane aqueous emulsions for waterproofing of building materials)

IT 22829-17-0D, Ammonium zirconium carbonate, reaction products with carboxylic acids or anhydrides and aromatic amines
 RL: MOA (Modifier or additive use); USES (Uses)
 (as reticulation agent; silane aqueous emulsions for waterproofing of building materials)

IT 99734-09-5D, ethoxyl
 RL: MOA (Modifier or additive use); USES (Uses)
 (nonionic surfactant; silane aqueous emulsions for waterproofing of building materials)

IT 110-91-8, Morpholine, uses 124-09-4, Hexamethylenediamine, uses 302-01-2, Hydrazine, uses 2486-70-6, 3-Methyl-4-Aminobenzoic acid 2943-75-1, Octyltriethoxysilane 9003-07-0D, Polypropylene, diol, ester, amide, or amine derivs. 9043-30-5D, reaction products with aromatic amines, carboxylic acids, and zirconium salts 25322-68-3D, Polyethylene glycol, diol, ester, amide, or amine derivs. 27014-42-2 51178-86-0
 RL: MOA (Modifier or additive use); USES (Uses)
 (silane aqueous emulsions for waterproofing of building materials)

IT 115-70-8D, 2-Amino-2-ethylpropane-1,3-diol, reaction products with carboxylic acids or anhydrides and metal salts
 RL: MOA (Modifier or additive use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
 (silane aqueous emulsions for waterproofing of building materials)

IT 57-11-4D, Stearic acid, reaction products with ammonia and metal salts 110-86-1, Pyridine, reactions 7664-41-7D, Ammonia, reaction products with carboxylic acids or anhydrides and metal salts, reactions
 RL: MOA (Modifier or additive use); RCT (Reactant); RACT (Reactant or reagent); USES (Uses)
 (silane aqueous emulsions for waterproofing of building materials)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
 RE
 (1) Okada; US 4496687 A 1985 HCAPLUS
 (2) Rhone-Poulenc; WO 9747569 A 1997 HCAPLUS
 (3) Traver; US 4525502 A 1985 HCAPLUS
 (4) Victoria University; WO 9516752 A 1995 HCAPLUS

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